

E-MU Systems

Production Tools Software Bundle

PTSB-5



 CUBASE LE₄

SONAR LE

Proteus[®]
VX

Tutorials



Tutorials

for

E-MU Production Tools Software Bundle (PTSB-5)

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Revision: A

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TUTORIALS

Introduction

This guide contains step-by-step tutorials of basic recording operations using your E-MU audio interface and four of the applications in the E-MU Production Tools Software Bundle (PTSB-5).

- **Cubase LE4** - a 24-bit, multi-track audio/MIDI sequencer for OS X/Windows
- **Sonar 6 LE** - a popular 24-bit multi-track audio/MIDI sequencer for Windows
- **Ableton Live Lite 6** - an innovative composition and live performance tool for OS X and Windows
- **Proteus VX** - a software sound module with 1000 sounds (*Windows*)

We highly encourage you to perform the steps on your computer so that you can “learn by doing.” The first tutorial only takes about half an hour to complete, by which time you’ll know how to make multitrack recordings and much more.

NEED MORE HELP?

If you need additional help with the bundled applications, please see:

- **Windows:** Program Files\Creative Professional\
[Your E-MU Product]\Documents\3rdParty.htm.
- **OS X:** Applications Drive\Library\Documentation\
[Your E-MU Product]\3rdParty.htm\


Before you Begin...

- You should have already installed and tested the E-MU audio interface.
- You should hear the computer sounds coming out of the E-MU audio interface and your speakers when you play a CD or an MP3 using Windows Media Player or iTunes.
If not, refer to the Quick Start Guide or pdf manual (located under Help in the PatchMix or USB Audio Control Panel application) to make sure that the drivers are correctly installed and that your audio interface is properly connected. If necessary, uninstall the E-MU Drivers, then reinstall following the instructions in the manual.
- You should have already installed Cubase LE4, Sonar LE, and Ableton Live Lite 6 E-MU Edition software on your computer. Windows users should also have the Proteus VX software sound module installed.
- A source of audio should be connected to the inputs (a microphone, musical instrument, or CD/MP3 player).

IMPORTANT - 0404-PCle, 1212PCle, 1616-PCle owners:

Select the **Product Default** session in PatchMix before launching any of the third party applications. This will ensure that ALL your available inputs appear in the audio applications and will avoid unnecessary confusion.

► To Select the Product Default Session:

1. Select **New Session**  from the PatchMix Mixer view.
2. Select **Product Default** from the list of available Templates and click **OK**.
3. Click **OK** again when the Session Settings dialog box appears.
4. Close the PatchMix DSP Mixer.

TIP . . .

Additional sound banks are available for the Proteus VX software sound module. Go to E-MU Sound Central at: <http://www.emu.com/shop/>

NOTE

Proteus VX sound banks are loaded into system RAM. Some factory sound sets may be too large to fit into your available RAM.

Proteus X2, Emulator X2 and Emulator X3 have vastly expanded capabilities over Proteus VX and both stream samples from your hard disk requiring far less available RAM space.

WARNING!

Windows Users - After checking your audio, be sure to quit Windows Media Player.

Getting Started with Steinberg Cubase LE4

(Windows, OS X)

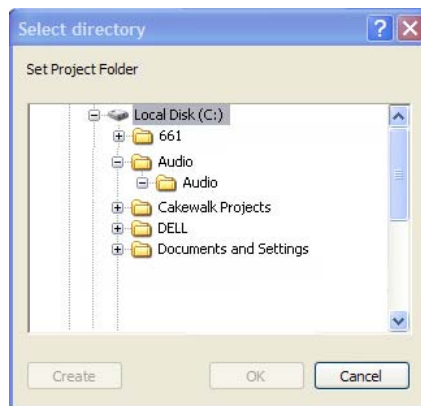
Steinberg Cubase LE 4 is a 24-bit, multi-track audio/MIDI sequencer with high-quality effects, automation, virtual instruments (VSTi), and many other professional features.

The following step-by-step tutorials are designed to get you recording as quickly as possible.

1 - Setting up Cubase LE4

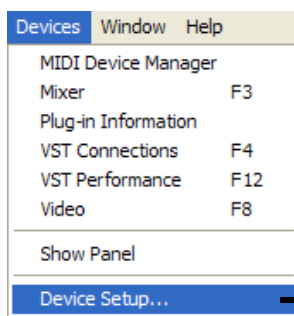
Follow these instructions carefully to ensure that Cubase LE 4 runs smoothly the first time. Cubase LE 4 will remember these settings, so you'll only have to do this once.

1. **Open Cubase LE 4** from the Start menu. An ASIO multimedia driver test dialog box will pop up to ask if you want to run the ASIO test. Choose **No**, because you won't be using the driver anyway.
2. Select **New Project** from the **File** menu.
3. Select **Empty** and click **OK**.
4. A **Select Directory** pop-up dialog box will appear. Choose a location on your hard disk where you want to store your audio files, then click **OK**.
5. The Cubase LE 4 Project window appears.
6. Select **Device Setup...** from the **Devices** menu.

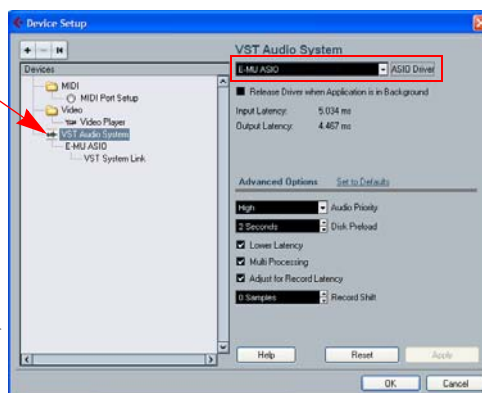


TIP . . .

If you have two or more hard disks, it's better to store audio files on a disk that isn't running your OS.



Step 10:
VST
Audio



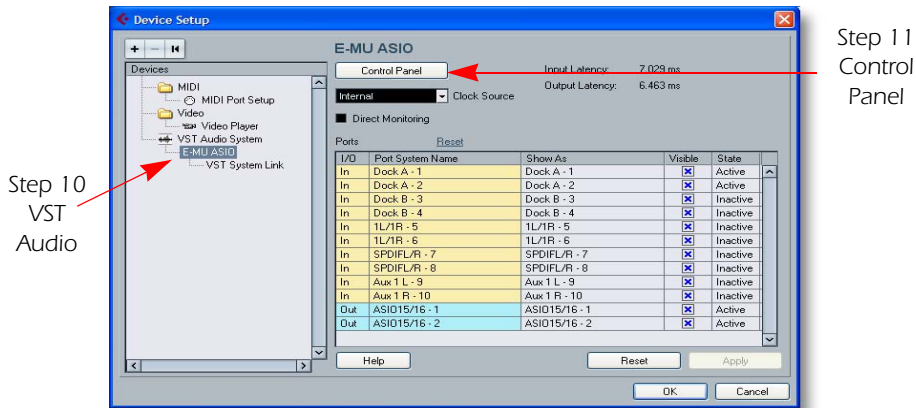
7. Select **VST Audio System** from the left pane.
8. Select the **ASIO Driver**. Choose your E-MU interface from the list. Choose: **E-MU ASIO (0404, 1212, 1820, 1616 Digital Audio Systems)**, **ASIO E-MU 0404|USB**, **ASIO E-MU 0202|USB**, or **ASIO E-MU TRACKER Pre|USB**.
9. A pop up dialog box asks you if you want to keep or switch the ASIO driver. Select **Switch**.

WARNING!

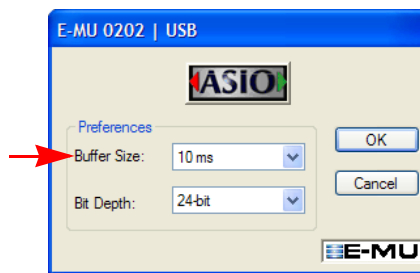
DO NOT select the "ASIO Multimedia Driver" or the "ASIO Direct X Full Duplex Driver."

Buffer Latency Setting

- Click on the name of your E-MU interface that appears immediately below **VST Audio System** in the Devices pane. Refer to the following screen.



- Click the **Control Panel** button. The pop-up dialog box shown at right appears.
- Set the **ASIO Buffer Latency** as low as your computer will allow and click **OK**. (10ms is a good starting point.) A low latency setting is important to assure fast response when using virtual instruments and to minimize delay when monitoring through Cubase. If you hear crackles or other audio problems, try increasing the Buffer Size.
- Close the Device Setup screen by clicking **OK**.

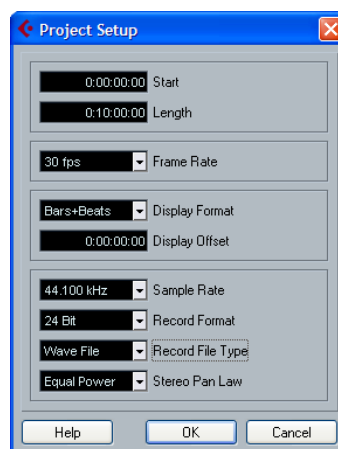


NOTE

E-MU 0202 Control Panel is shown at left. The Bit Depth field does not appear with 0404PCI, 1212, 1820 or 1616.

Setting up a New Project

- Select **New Project** from File menu in Cubase LE 4. A pop-up Template selection dialog box appears. Select **Empty**, then click **OK**.
- Another pop-up dialog box appears asking you to select the directory in which your audio files will be stored. Choose a location to store your audio files and click **OK**.
- Select **Project Setup** (Shift +S) from the **Project** menu. This is where you set the Sample Rate and Record Format (bit depth), among other things. Set the Record Format to **24 Bit** and the Sample Rate to **44.100 kHz**.



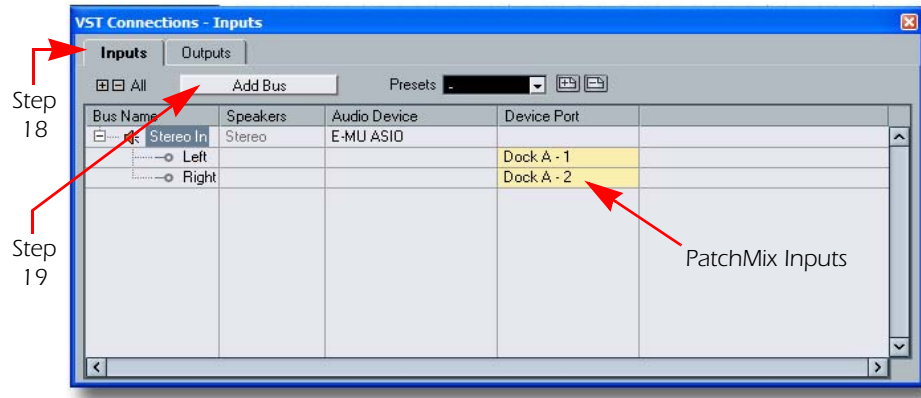
NOTE

If the Cubase LE 4 application crashes for any reason, it is recommended that you re-boot the computer.

Optional - Add Additional Input Busses

If you are using an audio interface that has more than two inputs (0404 USB, 0404, 1212, 1616, 1820), the following instructions will allow you to select these extra inputs to feed your audio tracks.

17. Select **VST Connections** (F4) from the **Devices** menu.

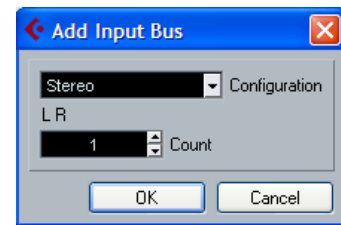


TIP . . .

You can also Rename your Input Busses here to avoid confusion when assigning Inputs to tracks.

18. Select the **Inputs** Tab, revealing the window shown above.

19. Click the **Add Bus** button. The pop-up dialog box shown at right appears.



20. Select the number of mono or stereo input busses you want, then click **OK**.
21. Additional mono or stereo busses appear in the list. Note that the actual PatchMix input label appears in the Device Port field.

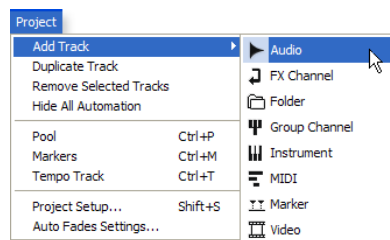
22. Close the window by clicking the close box. The inputs you added will now be available for selection in the Track Input field of the Inspector pane.

2 - Basic Multitrack Recording

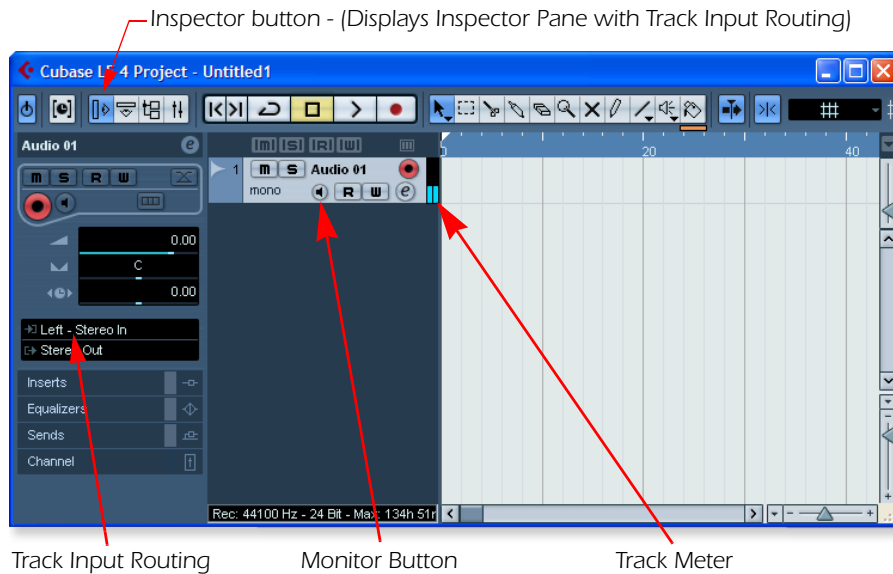
This tutorial assumes you're using a single input or a pair of inputs. For more advanced recording, refer to the Cubase LE 4 manual.


Add an Audio Track

1. From the Cubase LE 4 menu bar, select **Project, Add Track, Audio**. A pop-up dialog box appears, asking you if you would like to add a mono or stereo track. **Choose a mono track** for now. After making your selection, click **OK**. A new audio track is added to the project window.






Select Mono (or Stereo)



- The **Track Input Routing** field is where you connect your audio inputs to the track. "Left-Stereo In" will appear in the Track Input field. You can change this to "Right-Stereo In" if you want to use the right input. *(Click and hold the mouse over the label.)*
 - If you added extra VST Connections (Step 17 on the previous page), you'll be able to choose additional inputs.
- Make sure the Monitor button  is **OFF**. You will be direct monitoring the input through your E-MU Interface.

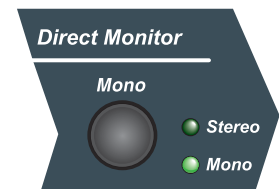
Important: If you use hardware Direct Monitoring, you will not be able to hear VST effects inserted on the track. If you wish to monitor your VST effects while recording, turn Off Direct Monitoring and use software monitoring instead
- If you have a 0202 USB, 0404 USB or Tracker Pre, press the **Direct Monitor** button. If you are recording a mono track, set Direct Monitor to **Mono** by pressing the Direct Monitor button again.

Get Ready To Record

- Plug in your instrument or microphone. Press the **Monitor button**,  turning software monitoring **On**. You should see activity on the Track Meter (see above) when feeding a signal into the input. This verifies that you are routing the correct input to your track. If you don't see meter activity, check your input routing.
- Press the Monitor button  again, turning software monitoring **Off**.
- Optional Step - Metronome:** To toggle the Metronome on and off, press **C** on the computer keyboard. To adjust the metronome output level, press the transport **Play** control, then select **Metronome Setup...** from the **Transport** menu. Use the volume slider to set the desired metronome level.
- Press the **Go to Previous Marker / Zero** button. 
- Make sure the **Record Enable** button on the track is on (it should be on by default).



0202 USB, 0404 USB or Tracker Pre Owners:

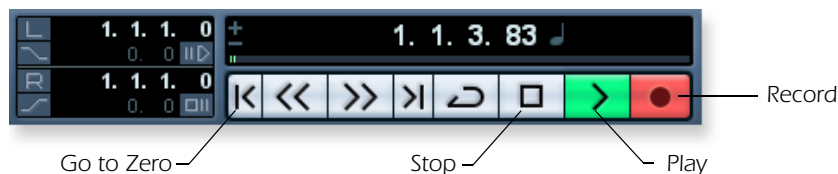


The Direct Monitor Button routes the inputs directly to the outputs.

NOTE

Turning on the metronome adds a 2-bar lead-in before recording begins.

10. Press the **Record** button on the Cubase transport control panel. The button turns red and you're recording.



11. When you're finished recording your track, press the **Spacebar**, or press the **Stop** button on the Cubase Transport Control.
12. Press the **Go to Zero** button. ⏮
13. Press the **Spacebar** or press the **Play** button to play back your new Track.

Record Another Track

14. Press the **Go to Zero** button. ⏮
15. Drag the audio chunk you just recorded down below itself and release the mouse button. A new track is automatically created with your recording. This is a quick and easy way to set up a new track in Cubase. Now you're all set to record again on Track 1.



16. Press the **Record** button on the Cubase transport control panel and you're recording again. You'll hear your first track playing along with you.
17. **Repeat steps 12-14** to record more audio tracks.
18. Press the **Mute** button **m** to silence any tracks you don't want to hear.

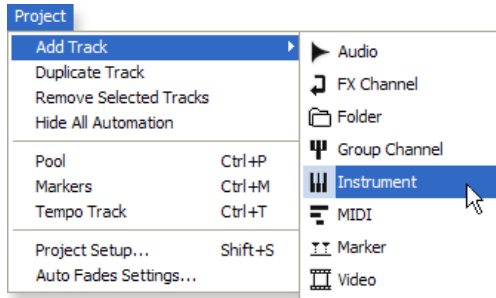
3 - Recording a MIDI Track using the Proteus VX Sound Module

(Windows only)

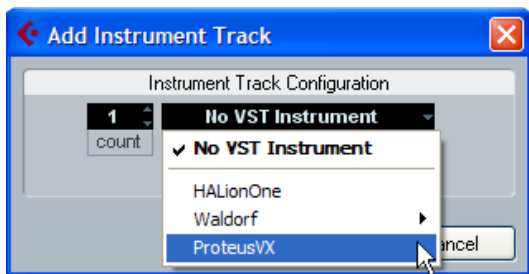
You'll need a MIDI interface and a MIDI keyboard (or other MIDI input device) for this tutorial. Please refer to the Proteus VX manual for the complete set of instructions (*located under the Help menu item*).

Make the Connections

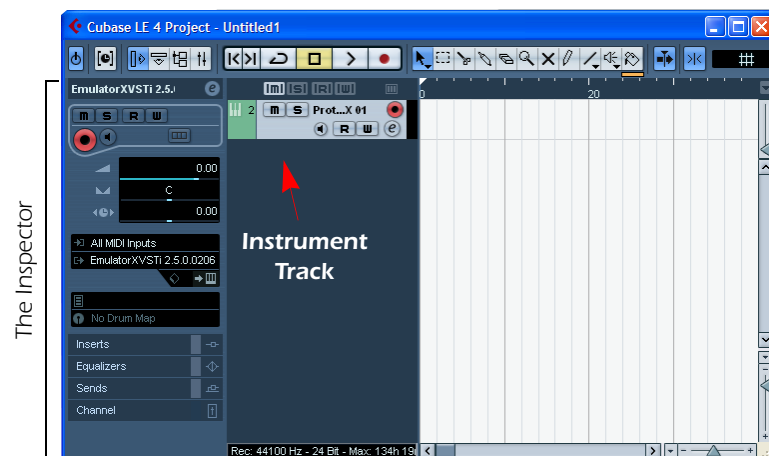
1. Connect the MIDI out of your MIDI keyboard to the MIDI input of your MIDI interface.
2. From the **Project** menu, select **Add Track, Instrument**.



3. A pop-up dialog box appears asking you to select a VST Instrument. Select **Proteus VX**. Select a **Count of 1**. Click **OK**.



After a short delay, the Cubase Project Window should now look more or less like the one below with one or more Audio tracks and one Instrument track:



NOTE

Proteus VX can also run as a standalone application.

NOTE

Selecting a Count of 2 or more, instantiates multiple copies of Proteus VX, which results in very inefficient usage of your CPU. (See the note on [page 13](#).)

NOTE #2

If you have Proteus X or Emulator X, you can select these in place of Proteus VX.

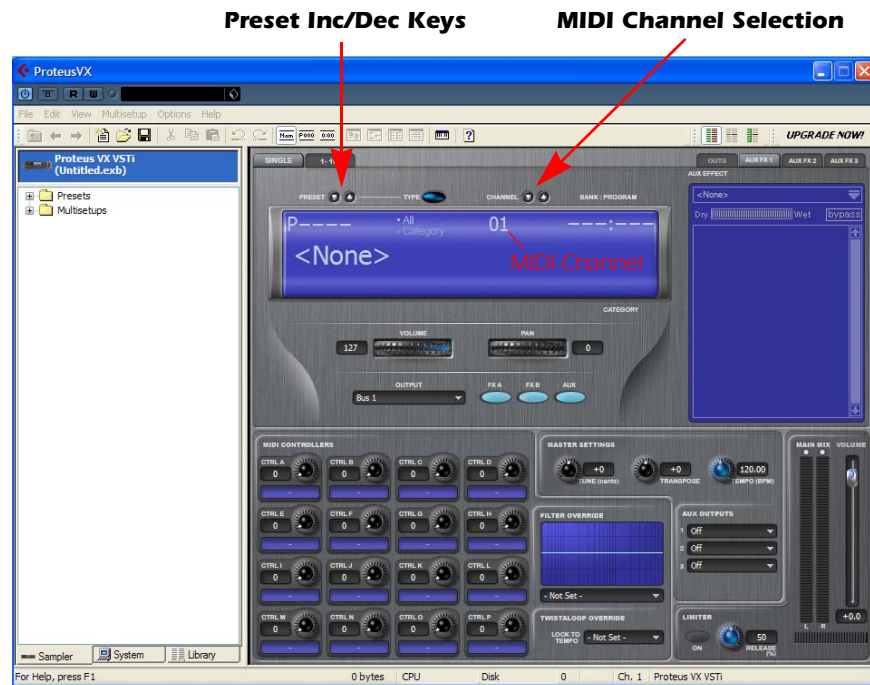
Open VX & Load a Bank


4. Since Proteus VX uses samples as the basis of its sound, you need to load a bank of samples before it can be played. The Edit Instrument button, located in the Inspector section of the window, allows you to edit the virtual instrument.



Edit Instrument Button

5. Click the **Edit Instrument** button. The Proteus VX main window appears.



6. Now we can load the Proteus X Composer bank. **Select Proteus X Composer** from the File menu. The bank is installed here: "Program Files\Creative Professional\E-MU Sound Central\Proteus X Composer." Loading takes a few seconds.
7. **Change the Preset using the Inc/Dec keys.** You also have to select a preset before you can hear anything. There are 1024 different presets (sounds) in this huge bank.
8. Bring up the **mini keyboard**  by clicking the icon on Proteus VX and play a few notes. You should be hearing sound.
 - If the sound volume is very low, you can decrease the Headroom of Proteus VX. (Options, Preferences, Headroom/Boost) Keep in mind that with less headroom, the Proteus VX will be more prone to clipping when multiple channels are played.
9. **Play your MIDI controller** and verify that it plays Proteus VX. If not, check to make sure your MIDI keyboard is set to the same MIDI channel number as Proteus VX (*probably channel 1*).
10. Try out the MIDI Controller knobs on your MIDI keyboard. In order for these to work, the continuous controller numbers of your keyboard knobs must match those on Proteus VX. (Options, Preferences, Controllers tab).
11. Feel free to play around for awhile and don't worry about losing anything. Nothing is made permanent until you **Save** the bank, so have fun.

TIP . . .

Increase the headroom setting (more positive) to increase the volume and decrease the amount of available headroom.

To Record a MIDI Track

12. Make sure the **Record Enable** button on the MIDI track is on (it should be on by default).



13. Click **Record** on the Cubase LE Transport control and start playing your MIDI controller.



14. Press **Stop** when you're finished recording the first track.
15. Press the **Go To Start** button. |<
16. Press **Play** > on the Cubase Transport to play back your track.

To Record a MIDI Track on another MIDI Channel

NOTE: Proteus VX VSTi can play back up to 16 MIDI tracks at once, however, the LE version of Cubase 4 only supports a single MIDI channel per VSTi. You *could* load another instance of the Proteus VX for each channel, but this is a very inefficient usage of your CPU resources and is NOT recommended. The full version of Cubase 4 does support multiple MIDI channels on a single VSTi.

Program Changes

Cubase LE 4 allows you to insert **MIDI Program Change** messages in the MIDI sequence. (Key Editor, List Editor, Insert Program Change) This trick makes it possible to use more than one Proteus VX preset in a song.

On Your Own

Cubase LE 4 and Proteus VX include excellent online documentation and help files. Take the time to learn all the features of these powerful programs so you can expand your musical boundaries.

Getting Started with Cakewalk Sonar 6 LE

(Windows)

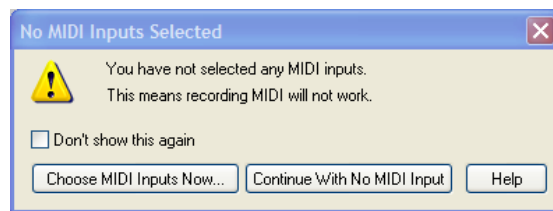
Sonar 6 LE is a 24-bit multi-track audio/MIDI sequencer with high-quality effects, automation, virtual instruments (VSTi/DXi), and many other professional features. The following step-by-step tutorials are designed to get you recording using Sonar 6 LE. After you finish the tutorial we encourage you to read the Sonar 6 LE pdf manual in order to learn about the many features of this comprehensive program.

1 - Setting up Sonar 6 LE

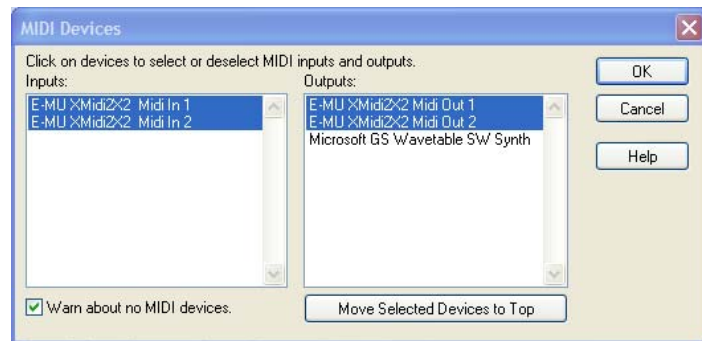
Follow these instructions carefully to ensure that Sonar 6 LE runs smoothly the first time. Sonar 6 LE will remember these settings, so you'll only have to do this once.

Run Sonar 6 LE for the first time

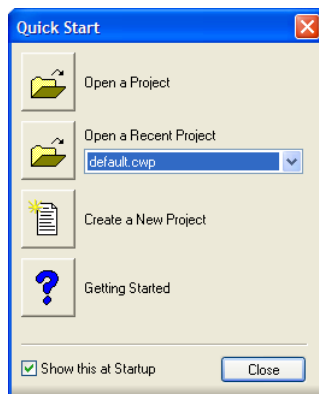
1. After installation Sonar 6 LE will automatically open. After completing the product registration, the following dialog box appears:



2. With a MIDI interface or USB keyboard connected (such as the E-MU Xmidi 2x2, Xboard, or a Digital Audio System), select "Choose MIDI Inputs Now." If you don't have a MIDI interface, select "Continue with No MIDI Input." A MIDI keyboard is necessary if you wish to use the Proteus VX sound module.



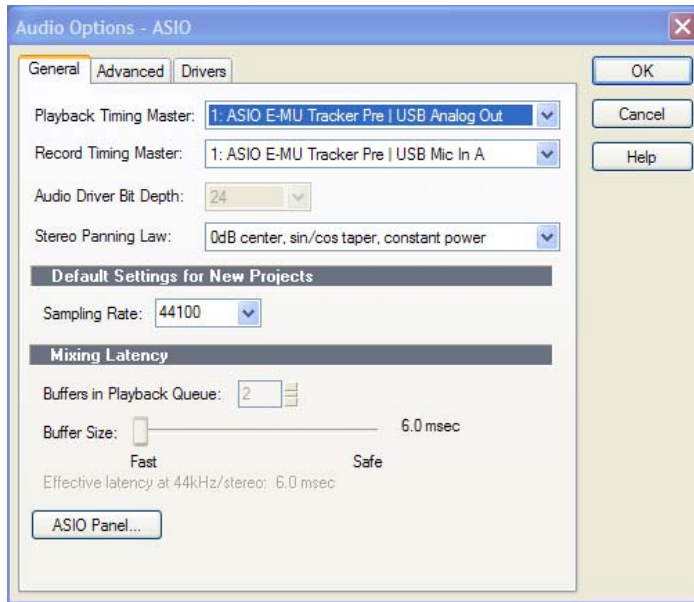
3. Sonar 6 LE opens and the following dialog box appears.



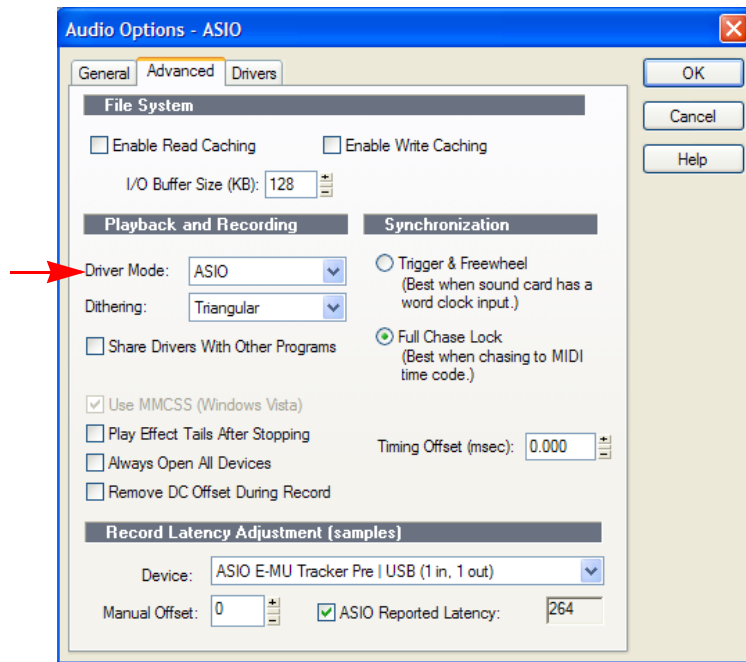
4. Click **Close** to close the dialog box. The Sonar Project Window appears.

Set-up the Audio Options

5. From the **Options** menu, select **Audio...** The following dialog box appears.



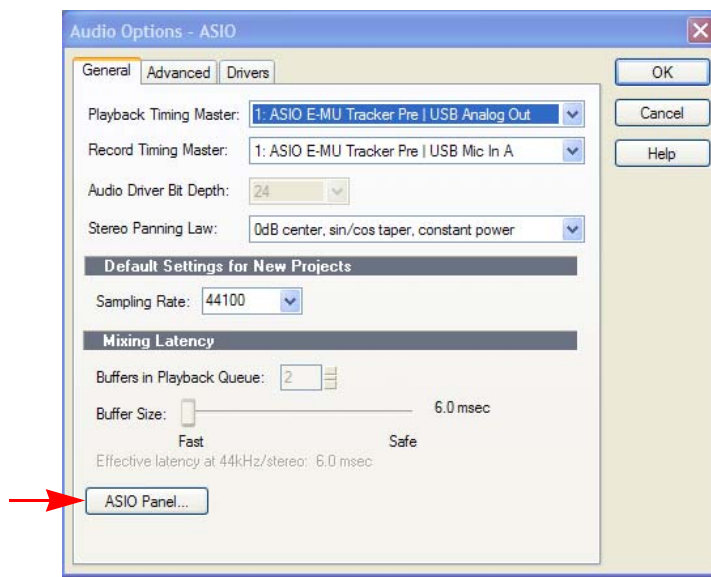
6. Click on the **Advanced** Tab to access the next window.



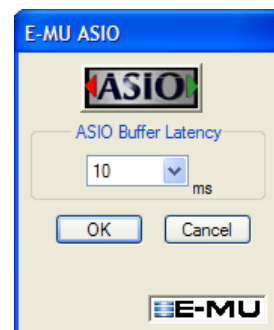
7. Select **ASIO** as the Driver Mode and click **OK**. You'll get a pop-up dialog box explaining that the ASIO settings won't take effect until the next time you start Sonar 6 LE.
8. Close **Sonar 6 LE** completely and restart the application.

Return to the Audio Setup Options

9. Once Sonar 6 LE has restarted, select **Audio** from the **Options** menu.

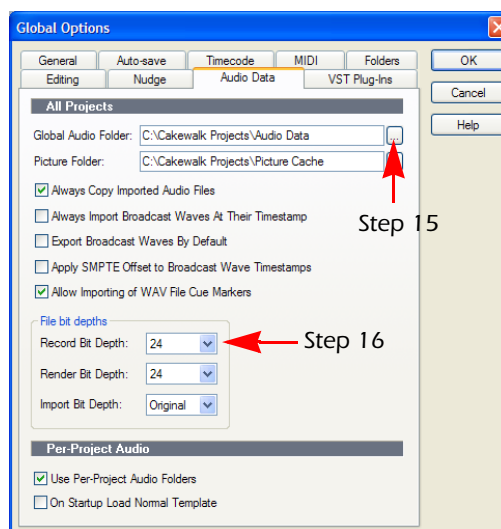


10. Click the **ASIO Panel**. The pop-up dialog box shown at right appears.
11. Set the **ASIO Buffer Latency** as low as your computer will allow. A low latency setting is important to assure fast response when using virtual instruments and to minimize delay when monitoring through Sonar 6 LE. If you hear crackles or other audio problems, try slightly increasing the Buffer Size.
12. Close the **Audio Options** screen by clicking **OK**.
Note: If the Sonar 6 LE application crashes for any reason, it is recommended that you re-boot the computer.



Set the Location of your Audio Files

13. From the **Options** menu, select **Global**.
14. Select the **Audio Data** tab as shown at right.
15. Select a location for the **Global Audio Folder**. This is where your large audio files will be kept.
16. Select **24 bits** as the Recording Bit Depth. Why not use the best possible resolution?
17. Click **OK** to select your choices and close Global Options.



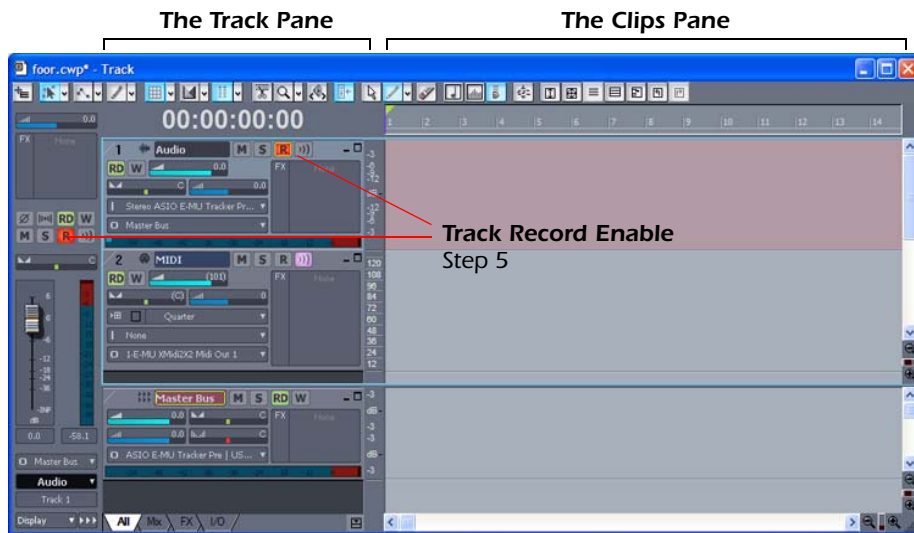
TIP . . .

If you have two or more hard disks, it's better to store audio files on a disk that isn't running your OS.

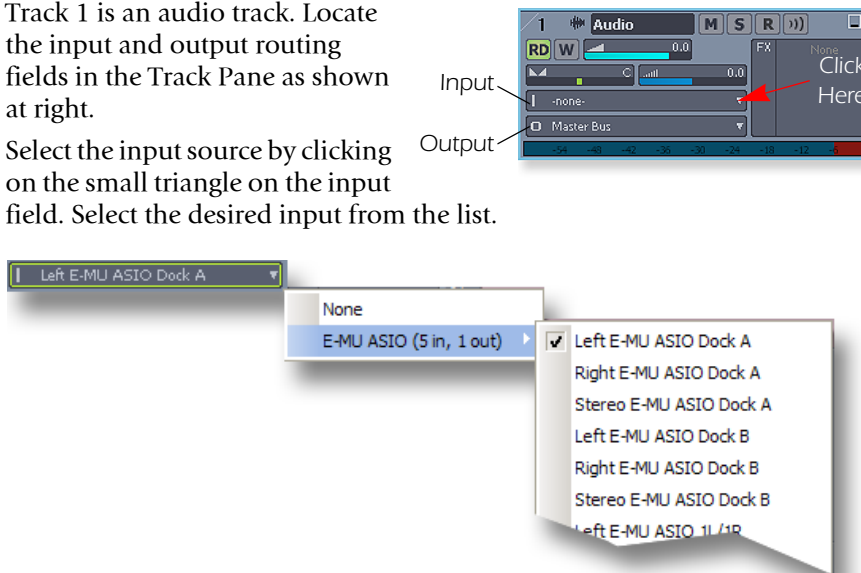
2 - Basic Multitrack Recording



This tutorial assumes you're using a single input or pair of inputs. Sonar opens by default with 1 audio track and 1 MIDI track.

The Sonar Project Window



1. Track 1 is an audio track. Locate the input and output routing fields in the Track Pane as shown at right.
2. Select the input source by clicking on the small triangle on the input field. Select the desired input from the list.




3. The Input Echo button  should be OFF. You will be direct monitoring the input through your E-MU Interface.
4. If you have a 0202 USB, 0404 USB or Tracker Pre, press the **Direct Monitor** button. If you are recording a mono track, set Direct Monitor to **Mono** by pressing the Direct Monitor button again.
5. Press the **Track Record Enable** button  for the track (see the diagram above). The track turns a dull red color to indicate that it is record-enabled. You should now see activity on the **Track Input Meter** when inputting a signal.

TIP . . .

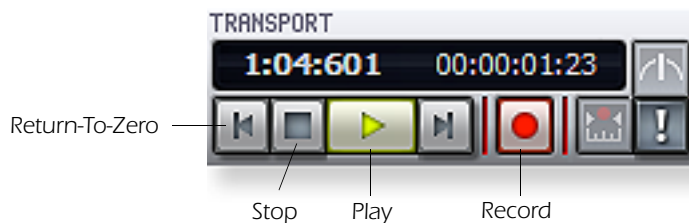
If you don't see meter activity on the track after enabling Record, check the Input for the track. Make sure you are selecting the proper input source.



6. If your input signal is either too weak or too strong, adjust the input level.
7. **Optional Step - Metronome:** From the **Options Menu**, select **Project**. Select the **Metronome** tab. Next select **"Use Audio Metronome"**. Click **OK**. Make sure the **Metronome During Record** button in the Transport Bar is On. 

Record a Track

8. Press **Record** on the Sonar 6 LE Transport control and start playing.





9. Press **Stop** when you're finished recording the first track.
10. Press **Play** on the Sonar 6 LE Transport to play back your track.
11. If you want to dump the track and start over, **Right-click over the waveform display** in the track and choose **Delete**.

Create another Audio Track

12. From the **Insert Menu**, select **Audio Track**. Track 3 appears in the Project window.

Record another Track

13. **Select Track 3** and click the **Restore Strip Size** button  to expose the input and output routing.
14. **Set the Input source** for the track. Click on the little triangle ▼ on the right side of the track **Input** box.
15. Disable record for Track 1 by clicking on the **Track Record** button Off. 
16. Enable recording for Track 3 by clicking on the **Track Record** button On.
17. Press the transport **Record** button and you're recording.

Hot Tip: A quick way to record additional tracks using the same input is to simply drag the Part (audio region) you just recorded up or down to another audio track in the Sonar Project Window, then just hit **Record** again and go. (Choose **Blend Old and New** when asked in the Drag & Drop Options.)

Save your Project

18. Choose **Save As...** from the Sonar 6 LE **File** menu to save your project. Choose a name and location that will make the project easy to find later.

TIP . . .

You can create a new track by selecting **Clone**, from the **Track** menu. This handy feature duplicates the currently selected track complete with input/output routings.

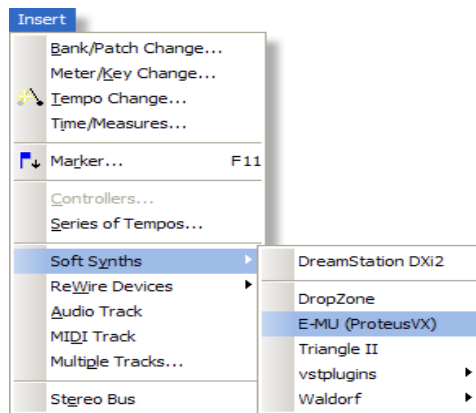
3 - Recording a MIDI Track using the Proteus VX Sound Module

These instructions explain how to start Proteus VX from within Sonar 6 LE. You'll need a MIDI interface and a MIDI keyboard (or other MIDI input device) for this tutorial. Please refer to the Proteus VX manual for the complete set of instructions (located under the *Help* menu item).

1. Connect the **MIDI output** of your MIDI keyboard to the **MIDI input** of your MIDI interface.

Select the Virtual Instrument

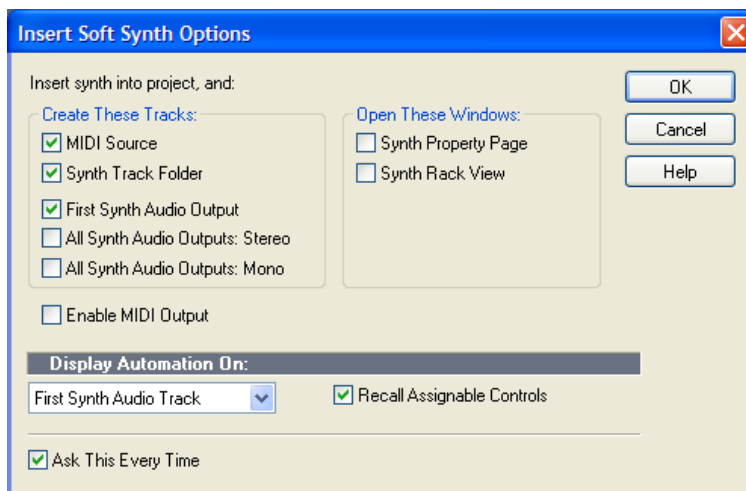
2. From the **Insert** menu, select **Soft Synths**, **E-MU**, **ProteusVX** from the **View** menu.



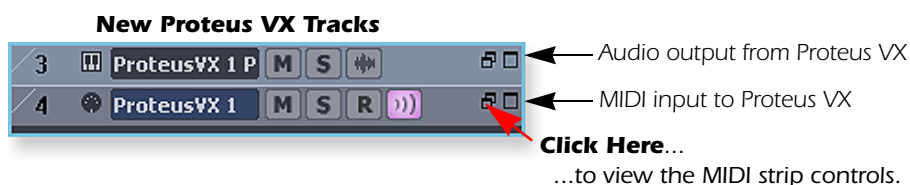
NOTE

Proteus VX can also run as a stand-alone application.


3. The following pop-up dialog box appears.



4. Select the default options (MIDI Source, Synth Track Folder, First Synth Audio Output) as shown. Click **OK** to continue. (You may have to wait a few seconds.) Proteus VX is added to the synth rack and two new tracks have been added to the track list.



TIP . . .

Check the Sonar MIDI Monitor  in the SysTray to verify that you're receiving MIDI.

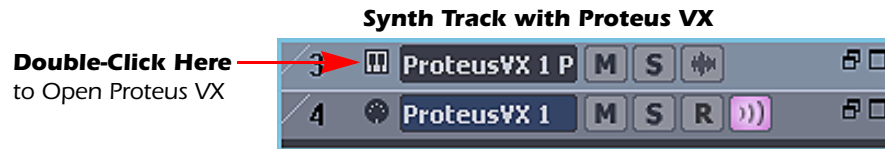
The MIDI Connection

5. **Your MIDI Interface** should already be selected as the MIDI input in **Omni** mode. You can examine this setting if you wish, by clicking on the "Restore Strip Size" box on the new MIDI track that was created.

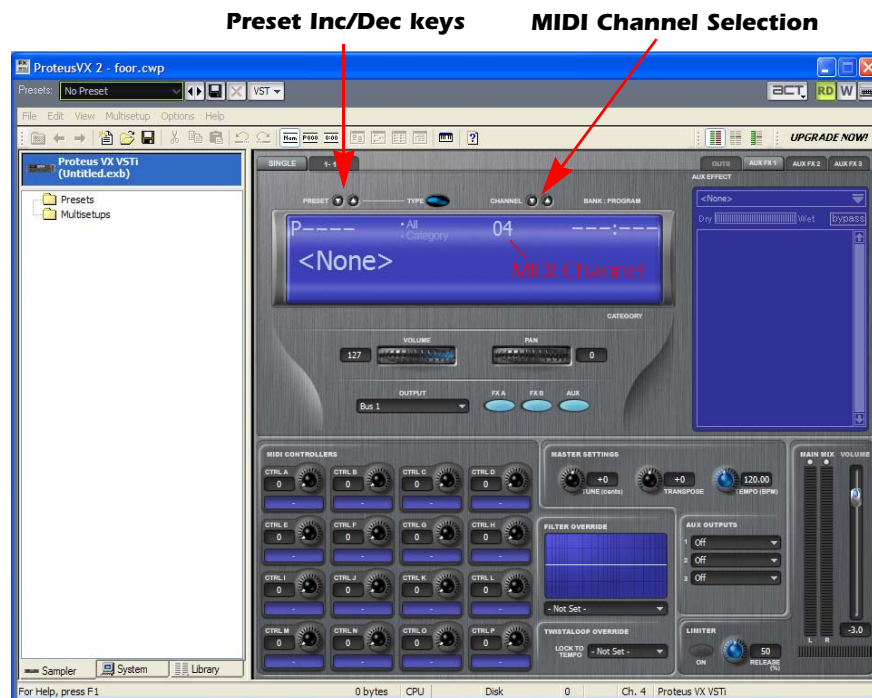
- **Note:** "Omni" mode allows Proteus VX VSTi to receive on all 16 MIDI channels from your MIDI keyboard. (Proteus VX VSTi is "multi-timbral" and can assign a different preset to each of the 16 MIDI channels.)

Open Proteus VX

6. Double-click on the **little keyboard icon** in the synth track to open the Proteus VX editor.




7. After a few seconds, the Proteus VX editor screen shown below appears.



Load the Proteus X Composer Bank

Before you can play Proteus VX, you have to load a bank of sounds. (This information will be saved when you save your Sonar LE Project.)

8. **Open the Proteus X Composer bank.** Select **Proteus X Composer** from the File menu. The bank is installed here by default: "Program Files/Creative Professional\E-MU Sound Central\Proteus X Composer." Loading takes a few seconds.
9. **Change the Preset using the Inc/Dec keys.** This bank contains 1024 different presets (or sounds).

10. Bring up the **mini keyboard**  by clicking the icon on Proteus VX and play a few notes. You should be hearing sound.
 - **Note:** If the sound volume is very low, you can decrease the Headroom of Proteus VX. (Options, Preferences, Headroom/Boost) Keep in mind that with less headroom, Proteus VX will be more prone to clipping when multiple channels are played. Watch the output meters on Proteus VX!
11. **Play your MIDI controller** and verify that it plays Proteus VX. If not, make sure that your MIDI keyboard is set to the same MIDI channel number as Proteus VX (*probably channel 1*). You can also change the MIDI channel of Proteus VX using the channel Inc/Dec keys shown on the previous page.


Play a Few Presets

12. To Audition Presets: first highlight the preset number (i.e. **P0000**), then scroll through the presets using the up/down keys on your computer keyboard.
13. Try out the MIDI Controller knobs on your MIDI keyboard.
In order to work, the continuous controller numbers of your keyboard knobs must match those on Proteus VX. (*Refer to the manual that came with your MIDI keyboard, or change the controller numbers on Proteus VX, located under Options, Preferences, Controllers tab.*)
14. Select the 16 channel tab. This page allows you to select presets for all 16 MIDI channels.



15. Select a preset for MIDI Channel 1 by clicking the little triangle.

To Record a MIDI Track

16. **Minimize** the Proteus VX window by pressing the minimize button on Proteus VX. 
17. **Maximize** the Proteus VX MIDI track by pressing the Maximize button.



TIP . . .

Increase the headroom number to increase the volume of Proteus VX. Alternatively, boost the gain elsewhere in your system.

WARNING!

Loading another instance of the Proteus VX for each channel is a very inefficient usage of your CPU resources and is NOT recommended.

Getting Started with Cakewalk Sonar 6 LE

3 - Recording a MIDI Track using the Proteus VX Sound Module

NOTE

You can also select a single preset for the track by selecting the Program Change number you want.



For some unknown reason, Sonar 6 LE filters out program change messages from a MIDI track.

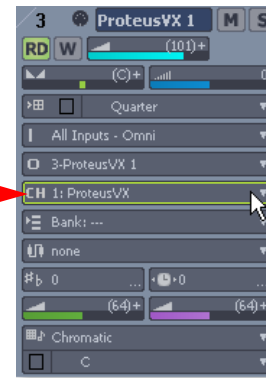
A Better Way: Assign up to 16 presets in the Proteus VX Multisetup and record a MIDI track for each channel.

18. The Track Pane expands to show all the track options, as shown at right. Set the Channel field (CH) to **1:Proteus VX**. (This converts data on ANY incoming MIDI channel to Channel 1 data.)

19. Restore the Strip to its normal size by clicking the "Restore Strip Size" button.

20. **Record-Enable** the MIDI Track by pressing the red **Record** button. The clips pane section of the track turns a dull red color to indicate that it is record-enabled.

- **IMPORTANT:** Be sure to turn Track Record Enable **OFF** for any tracks you don't want to record on, such as previously recorded tracks.



Track Record Enable

21. Verify that you hear the Proteus VX playing as you play your MIDI keyboard.

22. Press **Record** on the Sonar 6 LE Transport control and start playing.



Record

23. Press **Stop** (or hit the Spacebar) when you're finished recording the first track.

24. Press **Play** on the Sonar 6 LE Transport to play back your track.

To Record a MIDI Track on another MIDI Channel

Proteus VX VSTi can play back up to 16 MIDI tracks at once with a different preset on each channel. Using several channels on one VSTi uses far fewer CPU resources than using multiple VSTi's with one channel each.

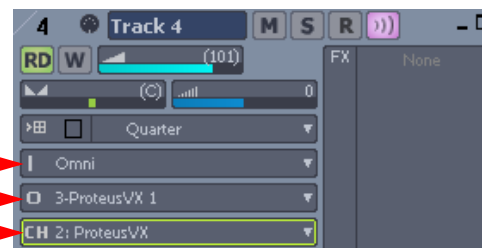
25. **Right-click anywhere in the Track Pane below the previous MIDI track.** A pop-up menu appears. **Select Insert MIDI Track.**

26. **Maximize** the Proteus VX MIDI track by pressing the Maximize button.

27. Make sure **Omni** is selected as the MIDI input (see below).

28. Make sure **Proteus VX** is selected as the **Output** (see below).

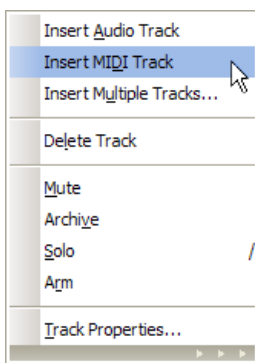
29. Select **MIDI Channel 2** in the Ch. field as shown at right.





28 →


29 →

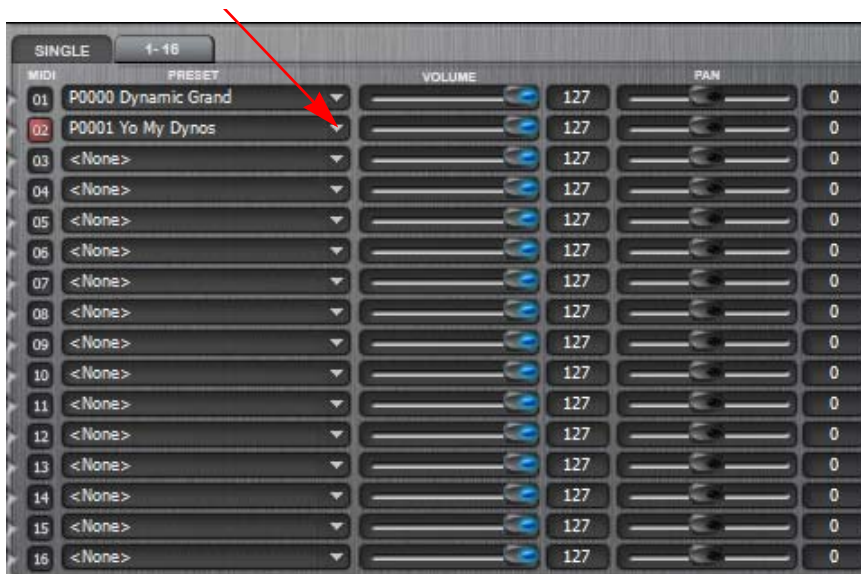
30 →



30. Record Disable the previous MIDI track by clicking the **Track Record Enable** button. 
31. Record Enable your new MIDI track by clicking its **Track Record Enable** button. 



32. Restore the Proteus VX editor by **double-clicking on the little keyboard icon**  in the Proteus VX track.
33. Select a preset for channel 2 by **clicking the little triangle on channel 2 in the 1-16 channel view of Proteus VX.**



34. **Play your MIDI keyboard** to listen to the presets during the selection process.
35. Click **OK** when you've made your selection.
36. **Minimize or close Proteus VX** when you've made your preset selection.
37. Press **Record** on the Sonar 6 LE Transport control and start playing.
38. Press **Stop** when you're finished recording the second track.
39. Feel free to record additional MIDI tracks. You have 16 MIDI channels.

On Your Own

Now that you've had a little taste of what Proteus VX can do, please read the Proteus VX Operation Manual pdf to learn all about this exceptional instrument. Sonar 6 LE also includes useful online documentation and help files to help you learn about the features of this powerful program.

TIP . . .

The Export Multisample feature of Proteus VX allows you to save a bank containing **ONLY** the presets and samples used in the Multisetup. This gives you a smaller Project and a shorter load time.

Getting Started with Ableton Live Lite 6

(Windows/OS X)

This guide contains a basic walk-through of Ableton Live Lite 6 (E-MU Edition) to get you recording and playing back audio. The guide also discusses configuring Ableton Live Lite 6 to use VST instruments, such as Proteus VX for Windows. We encourage you to perform the steps on your computer as you read so that you can “learn by doing.”

Ableton Live Lite 6 is an innovative composition and performance tool. Live combines digital recording, virtual instruments, and digital effects with an original interface design that many people find more intuitive than traditional designs.

The following step by step tutorials are designed to get you recording as quickly as possible. After you’ve finished the tutorial we encourage you to follow Ableton Live’s excellent interactive Lessons and read the Ableton Live reference manual pdf in order to learn more about the program.

Before you Begin:

- You should have already installed the E-MU software on your computer according to the instructions in your “Getting Started” manual.
- You should have already installed the **Ableton Live Lite 6** software on your computer and unlocked it according to the instructions provided with the Ableton User Manual.
- You should hear sounds from Ableton Live 6 when you play the demos.
- PC Users - You should have already installed the **Proteus VX** software.
- You should have your MIDI interface and keyboard connected if you want to record MIDI.

NOTE

The first time you run Live, you may get the message, “Audio is disabled. Please choose an audio output device from the Audio Preferences.”

Simply follow the instructions in “1-Setting up the Preferences” to correct the situation.

1 - Setting up the Preferences

Unlock Ableton Live Lite 6 for E-MU by following the instructions in the Preferences menu. (*Windows - Options menu, Preferences; OS X - Live menu, Preferences*) Read the following instructions to configure the Audio and MIDI preferences. Live will remember these settings, so you’ll only have to do this once.

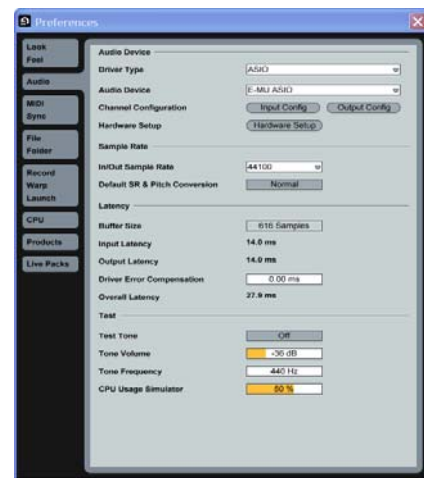
Set up the Audio Parameters

1. Click the **Audio** tab of the **Preferences** dialog box. The Audio Setup page appears.

OS X



Windows



WARNING!

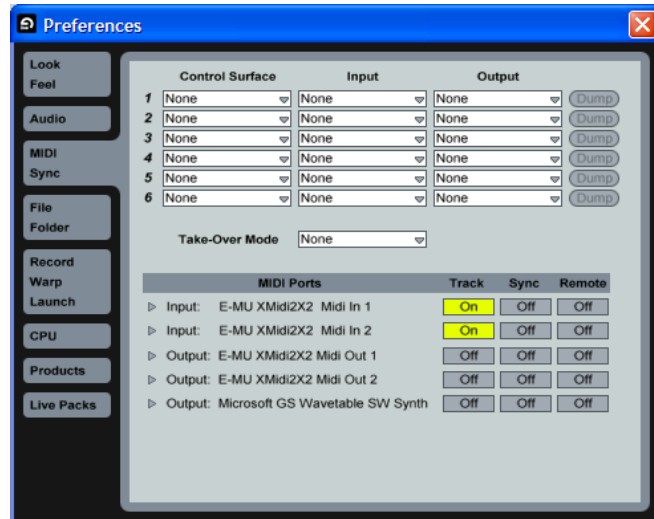
DO NOT select the “ASIO Multimedia Driver” or the “ASIO Direct X Full Duplex Driver.”

2. Select **ASIO** as the Driver Type. Select **[your E-MU Interface]** as the Audio Device.

Check the MIDI Parameters

3. Click the **MIDI/Sync** tab of the Preferences dialog box. The MIDI Setup page appears. (Live enables every MIDI input by default.)

Windows



OS X



4. Your MIDI interface or USB MIDI keyboard should appear in the list. Make sure it's selected.

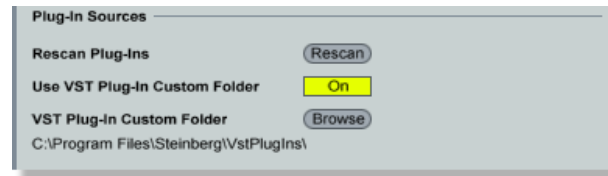
Check the File Folder Parameters

If you have trouble browsing Audio Units or VST Plug-Ins, you may need to manually locate them. Follow the steps below. If you have problems, please refer to the Live pdf manual, located under "Help".

5. Click the **File Folder** tab of the Preferences dialog box. The **File Folder** page appears.

6. **PC Users:** Make sure that “Use VST Plug-In Custom Folder” is selected as shown below. The default location for Proteus VX VSTi is: “C:\\Program Files\\Steinberg\\VstPlugIns\\”. If not already selected, browse to this folder unless you’re certain that your VST Plug-Ins are stored in another location.
7. **OS X Users:** Turn “Use Audio Units On,” and browse to the location where your Audio Units (if any) are stored.

Windows



OS X



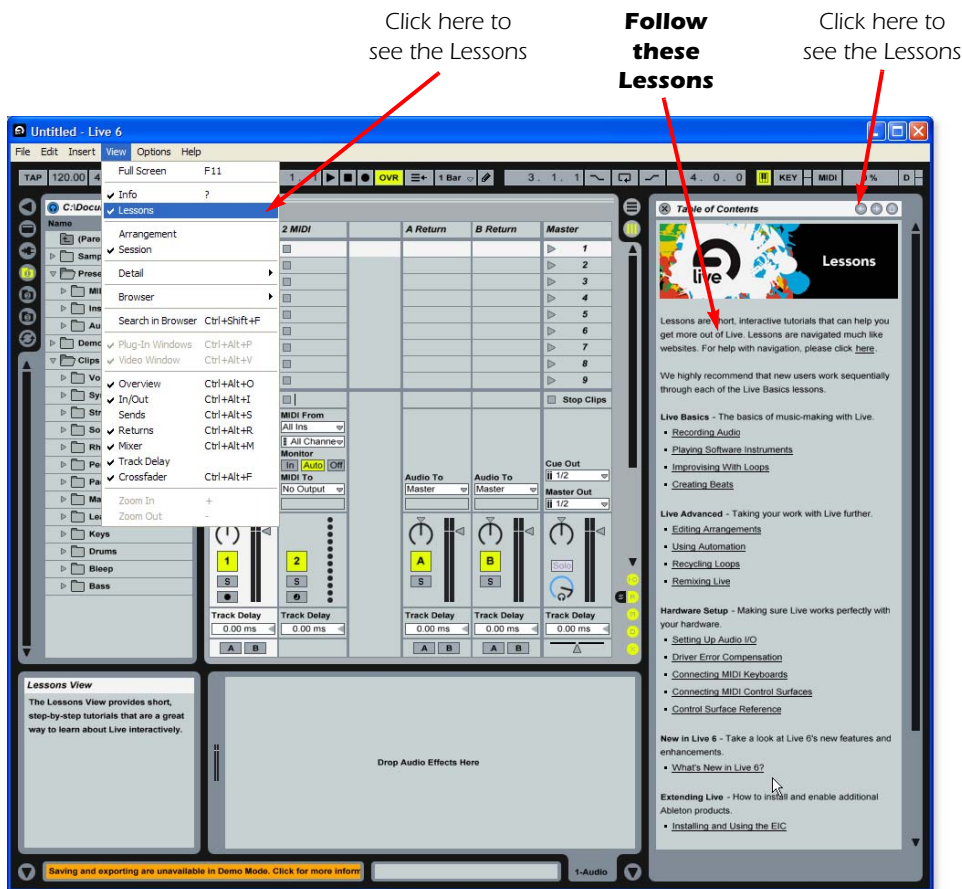
Demo Mode

In order to save your Live Sets, Demo Mode must be Off for all products. Ableton Live Lite 6 - E-MU Edition installs with Demo mode On for the other Ableton products such as “Operator” and “Sampler”.

8. Select the **Products** tab.
9. Deactivate Demo Mode for each product that has Demo Mode on.
10. Preference Setup is now complete. Click the **close button** to close the window.

2 - Follow the Live 6 Lessons

Ableton Live contains built-in tutorials to help you learn your way around. If you don't see the **Lessons** pane on the right side of the window, simply select Lessons from the View menu.



1. The first Lesson - **Recording Audio**, explains the basics of recording.
2. Lesson 2 - **Playing Software Instruments**, is also highly recommended. This Lesson provides a good background for using Proteus VX VSTi in Ableton Live.
3. After Lessons 1 and 2 feel free to continue on with the rest of the Lessons. When you're ready to add Proteus VX to the mix, read on.

NOTE

These instructions also apply to Proteus X or Emulator X.

NOTE

Please refer to the Proteus VX manual for the complete set of instructions (located under the Help menu item).

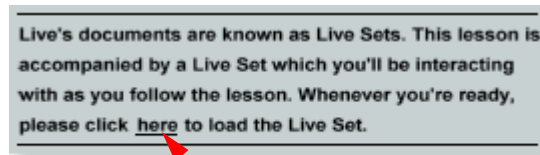
Proteus VX can also run as a stand-alone application.

3 - Running the Proteus VX Sound Module from Ableton Live (Windows only)

These instructions explain how to run Proteus VX from within Ableton Live Lite 6. Proteus VX adds a professional-quality sample player and over 1000 new sounds and integrates perfectly with Ableton Live Lite 6. In this tutorial, you'll learn how to use a MIDI keyboard and the pre-recorded MIDI loops that come with Ableton Live Lite 6 to play Proteus VX.

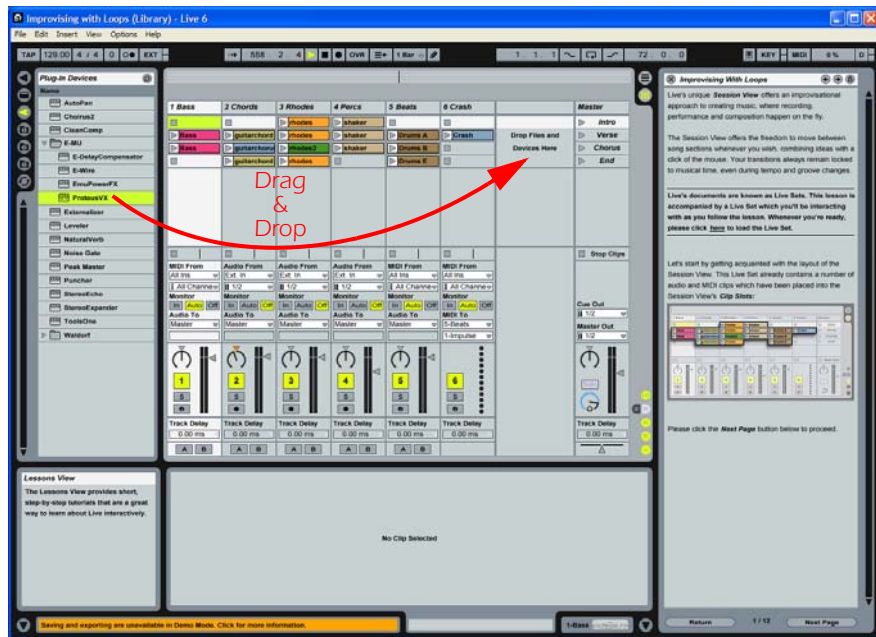
- In preparation for this tutorial, select the third Live lesson - **Improvising With Loops**. If you haven't already done so, go through the Lesson at least once until you are familiar with the concept of loops in Ableton Live.

- Load the Live Set associated with the **Improvising With Loops** lesson by clicking the button shown below.



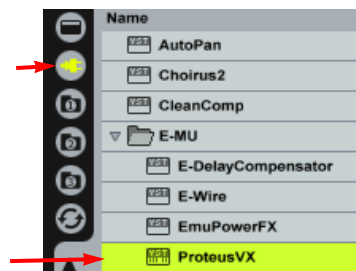
Click Here

- The Live Set shown below appears. Press the **Play** button to check it out.



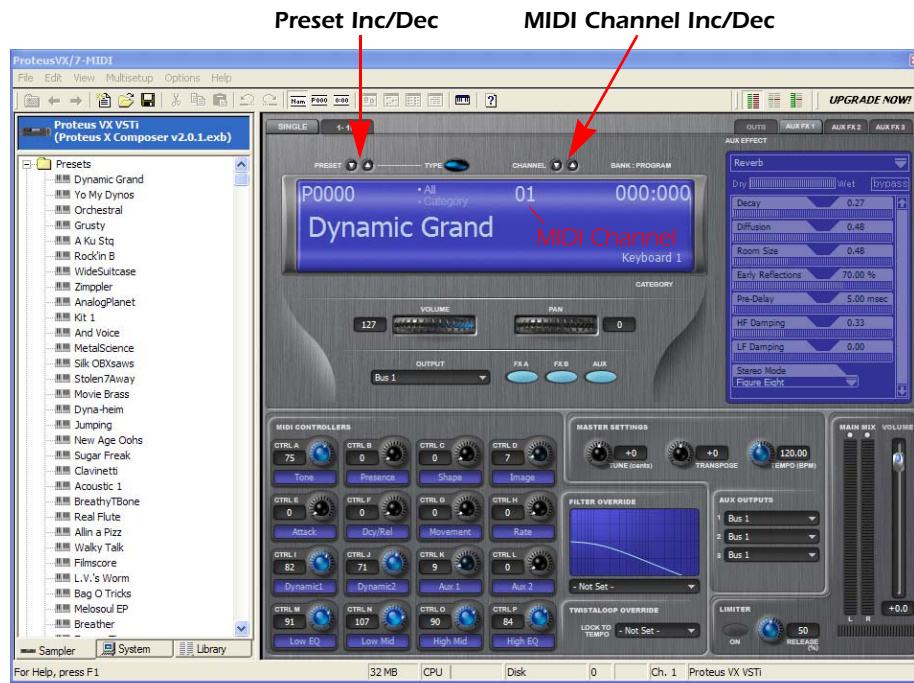
Browser Pane

- From the Plug-in Device Browser, select **Proteus VX** from the E-MU folder.
- Click and drag the Proteus VX VST icon over the Clip/Device Drop Area as shown above. Wait a few seconds. Patience.
- The Proteus VX editor window appears. (See the image on the following page.)



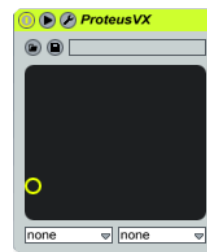
Load the Proteus X Composer Bank

- Open **Proteus X Composer** from the File menu. The bank is installed here by default: "Program Files\Creative Professional\E-MU Sound Central\Proteus X Composer." Loading takes a few seconds.



- Make sure Proteus VX is set to **MIDI Channel 1** as shown above.
- Using the preset increment/decrement keys, select **Preset 0005 - Rock'in B**.
- Close the Proteus VX editor by clicking the close box. This only hides the editor screen and doesn't close Proteus VSTi.
- Notice that you now have a new MIDI Track and that the **Proteus VX Instrument** now appears at the bottom of the window.
- Select **File Browser 1**, open the **Clips** folder and open the **Keys** folder.
- From the Keys folder, drag and drop one or more files over to the **Clip area** on your Proteus VX MIDI track.

Proteus VX Instrument



(Whurlie -Chords shown)

Step 11



- Press the **Scene Launch** button for the Verse scene. **Verse**
- Drag and drop a few more clips over to the track and try them out.

NOTE

Proteus VX sounds are called Presets or Programs. Ableton Live Programs are offset by +1 from Proteus VX.

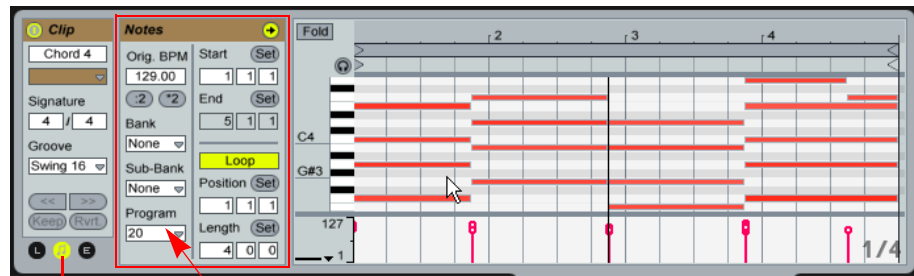
Change the Preset from Live

15. When you have a clip you like, click the **Clip Overview Hot Spot** or simply double-click on the clip. (Hint: Shift+Tab toggles the view.)



Clip Overview Hot Spot

The Clip View appears at the bottom of the application window.



Show/Hide
Notes Box

Program
Select Field

16. Click on the **Show/Hide Notes Box** to reveal the notes box as shown above.

17. Click on the **Program Select** field in the Notes box. →



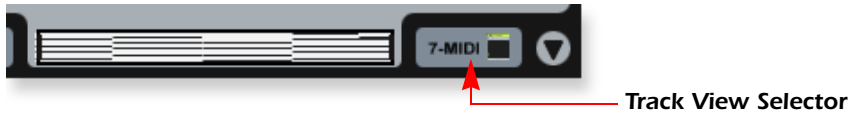
A black border appears around the Program field showing that it has the "focus". Select any preset number from the pop-up list.

18. Use the **Up/Down Arrow** keys on your computer keyboard to increment or decrement through the presets. You can even do this while the clips are playing to try out sounds in a hurry.
19. Assign different Program Change numbers to different clips and notice that they are remembered by Live.

4 - Record a MIDI Track in Live


Proteus VX is a multi-timbral instrument with the ability to play 16 different sounds at once. Let's get ready to make a multitrack MIDI recording.

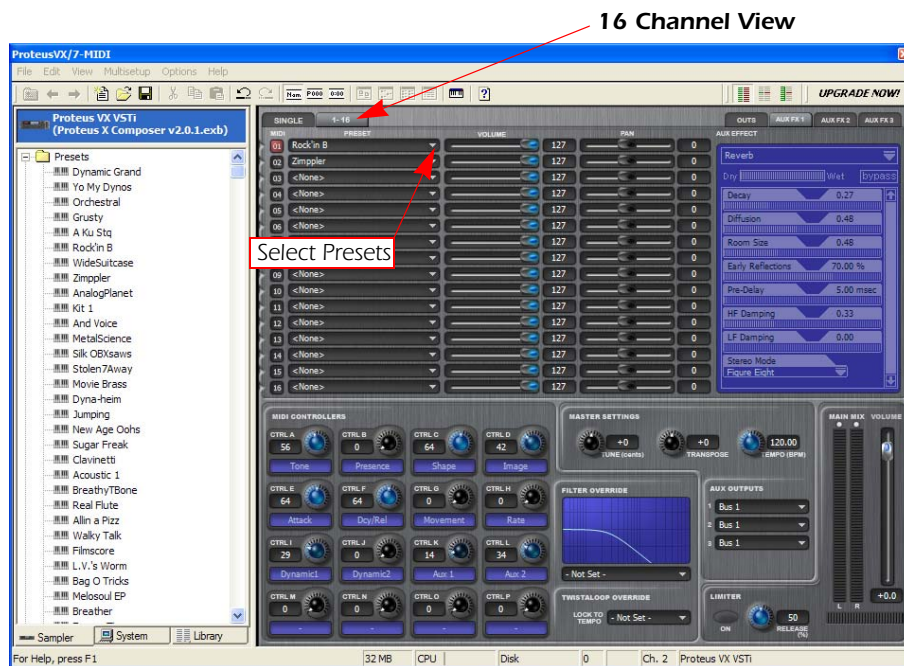
1. Click the **Track View Selector** at the bottom of the window or simply double-click on the clip to show the Proteus VX Device. (Shift+Tab toggles the view.)



The Proteus VX Device appears as shown below.




2. Click on the Tool icon  to bring up the Proteus VX editor.

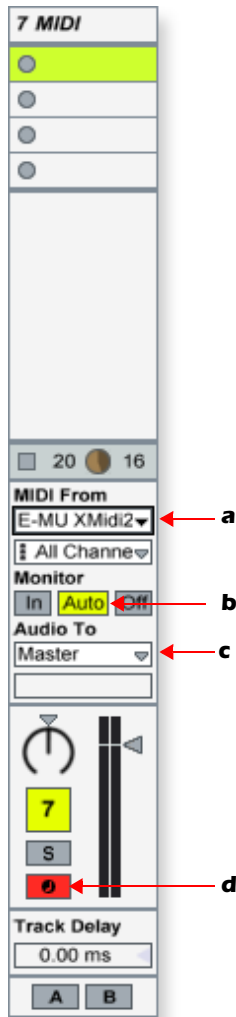


3. Click the **1-16** tab to view the preset selections 16 MIDI channels. When multitrack recording it's often easier to give each track its own MIDI channel and preset.

4. Click the little triangle to the right of the preset selection field for **Channel 1**.



5. Hit the **Spacebar** to start Live, then **browse through the presets**. Click **OK** when you find one you want to use for recording.
6. **Close the Proteus VX editor** by clicking the close box. 



7. Open the Preferences via the Options menu (PC) or Live menu (OS X) and choose the **Record/Warp/Launch** tab. Set the Count-in to any value other than "None." Live doesn't start recording until the count-in period has elapsed and gives you time to get ready after pressing "Record." **Close** the Window.
8. **Delete all the Clips** in your MIDI track. (Select a clip and hit backspace to delete it.)
 - If your MIDI interface isn't already connected, you'll have to quit Ableton Live Lite 6, connect the MIDI interface, then restart Ableton Live Lite 6 before continuing.
9. Set up the MIDI track as shown at left.
 - a. Select your MIDI Interface in the "MIDI From" field.
 - b. Monitor should be set to Auto.
 - c. Set the Audio To = Master.
 - d. Turn Arm Session Record On (red).
10. **Play the keyboard.** You should hear Proteus VX playing the last sound you selected on channel 1. Go ahead and change the sound if you wish. (Double-click the top of the Track, then click the **Wrench** icon on the Device Title Bar. Make sure you're changing the sound on channel 1.)

Get Ready to Record

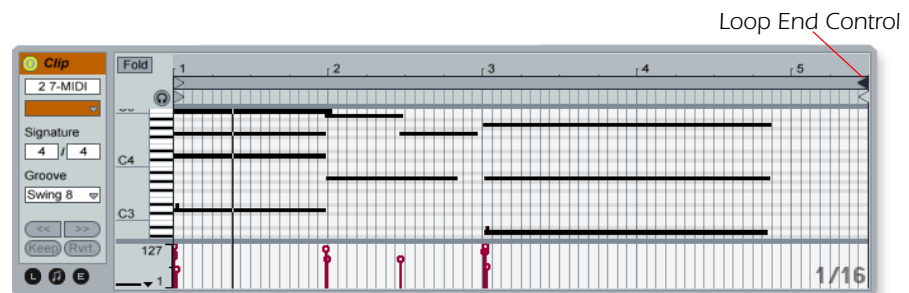
11. Start up the **Verse** using the **Scene Launch button** and practice playing along with it.
12. **Optional:** You can set the **Global Quantization** value to correct the timing of your playing. Set it to anything other than "None".



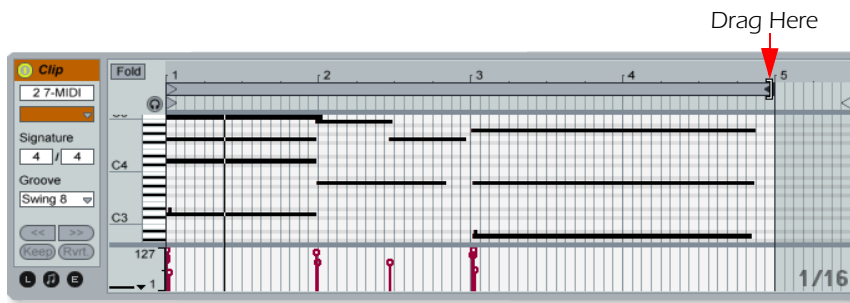
13. Click one of the round **MIDI Clip Record** buttons to begin recording. → Recording will begin after the Count-In period you specified.
14. Click the **Spacebar** to stop recording.

Adjust the Loop Length

15. Start up the Verse using the Scene Launch button and take a listen. You'll notice that your part doesn't line up with the others after the first play through. This is because your loop length is not a multiple of four bars. Let's fix that.
16. Click on the clip you just recorded and your clip will appear at the bottom of the window. It might look something like the one below.



17. Click and drag the Loop End triangle so that it lines up with the number 5. Now the loop is exactly 4 bars long and will sync with the rest of the song.



18. Start up the Verse again using the Scene Launch button. Now it should play in perfect sync.
19. For fun, try changing the Program Number. Remember how?
Click the Show/Hide Notes icon, give Program the focus, then change the Program number while the scene is playing using the up/down keys.
20. When you're happy with the recording, disarm recording for the track by clicking the arm button, turning it grey.

Add Another MIDI Track

IMPORTANT! - Ableton Live Lite 6 - E-MU Edition only allows you to create four MIDI tracks and we already have four. **Solution:** Delete track 6 Crash, which is only used as an accent for the song.

To Delete a Track: Click on the track heading to select it, then press the Backspace button.

21. From the Insert menu, select **Insert MIDI Track** (PC: Ctrl+Shift+T; OS X:). A new MIDI track appears.
22. On the new MIDI Track, the **MIDI To** box reads "No Output." Instead, select **6-MIDI**. This links the new MIDI track to the MIDI track containing Proteus VX (Track 7).
23. Click on the box that reads "All Channels" to see the list of MIDI channels.
24. Select **MIDI Channel 2** as shown at right.

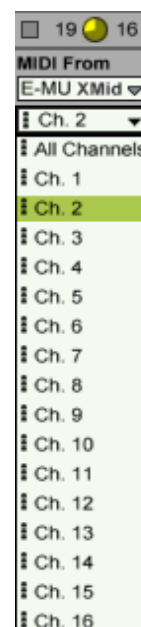
Choose a Sound for MIDI Channel 2

25. Click on the **6 MIDI** heading to show the Proteus VX VSTi. Next, click on the wrench icon again to open Proteus VX.
26. **Select a Preset on Channel 2.** Click the little triangle to the right of the preset selection field for **Channel 2**.





- **Note:** There are several ways to select presets. See the Proteus VX Operation manual pdf for details.

27. Bring up the Mini Keyboard by **clicking on the keyboard icon** in the Proteus VX toolbar. Play the mini keyboard to audition presets.



Get Ready to Record on Channel 2

28. Turn **Arm Session Record On**.  You should now be hearing the preset you selected on channel 2 when you play your MIDI keyboard.
29. Start up the **Verse** using the **Scene Launch button** and practice playing along with it.
30. Click one of the round **MIDI Clip Record** buttons to begin recording.  Recording will begin after the Count-In period you specified.
31. Click the **Spacebar** to stop recording.

Saving your Work

32. Save your work by selecting **Save Live Set As...** from the File menu. The next time you load the set, the Proteus VX bank will automatically load as well.

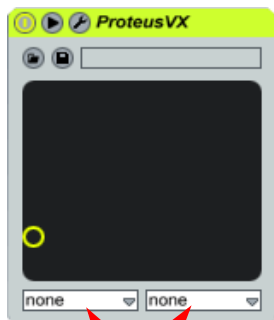
On Your Own

Now you've had a little taste of what Proteus VX and Ableton Live Lite 6 can do. But don't stop now! Read the Proteus VX Operation Manual pdf to learn all about this exceptional instrument.

Ableton Live Lite 6 includes several excellent hands-on tutorials to help you learn all the features of this ground-breaking musical application. Check them out!

Other Cool Tips

- **To control Proteus VX with the knobs on your MIDI keyboard:**
Go to the MIDI Preferences on Proteus VX (Options, Preferences, Controllers tab) and make sure the MIDI Continuous Controller numbers match the ones your keyboard is sending. You can change the controller numbers on either your MIDI keyboard or Proteus VX, just as long as they both match.
- **To control Proteus VX with the Assignable X/Y Controls in Live:**
Simply select the Proteus VX Channel and Proteus VX controller letter A-M for each axis of the X/Y controller. Open Proteus VX to see what controllers A-M are controlling. For more information about MIDI controllers please refer to the Proteus VX pdf manual.



Assign Controllers

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